

vacation, unless he goes to a laboratory or provides himself with expensive apparatus. The suggestions for field work in Miss Andrews's book, however, are well adapted for giving an ambitious student something to do outside of the laboratory and school-room.

An abridged flora of the Eastern United States, covering 368 pages, by another author, is bound in with some copies of this new book, as with its predecessor, for the benefit of those who may desire to increase their acquaintance with the vegetable kingdom by outdoor work.

ROLAND M. HARPER

Heredity and Eugenics*

Under this title there has appeared in book form a series of popular lectures which were delivered at the University of Chicago during the summer of 1911. The table of contents which is here printed gives an adequate and concise statement of the scope of these lectures.

I. Recent Developments in Heredity and Evolution: General Introduction.

II. The Physical Basis of Heredity and Evolution from the Cytological Standpoint. John Merle Coulter, Professor and Head of the Department of Botany, the University of Chicago.

III. The Method of Evolution.

IV. Heredity and Sex. William Ernest Castle, Professor of Zoology, Harvard University.

V. Inheritance in the Higher Plants.

VI. The Application of Biological Principles to Plant Breeding. Edward Murray East, Assistant Professor of Experimental Plant Morphology, Harvard University.

VII. Recent Advances and the Present State of Knowledge concerning the Modification of the Germinal Constitution of Organisms by Experimental Processes. William Lawrence Tower, Associate Professor of Zoology, the University of Chicago.

VIII. The Inheritance of Physical and Mental Traits of Man and Their Application to Eugenics.

* Pages i-vii + 1-315. [Illust.] The University of Chicago Press, Chicago, Illinois, 1912. Agents, The Baker and Taylor Company, New York. Price \$2.50.

IX. The Geography of Man in Relation to Eugenics. Charles Benedict Davenport, Station for Experimental Evolution, Carnegie Institution of Washington.

While not pretending to be exhaustive in scope, these combined lectures treat of the most important problems of heredity and eugenics. It is doubtful if a clearer and a more authoritative presentation of these topics, as they are understood to-day, could be made. The authors are leading investigators in their respective fields and they discuss the problems in the concrete, drawing freely upon experimental data and presenting conclusions with the use of few technical terms. There are ninety-eight illustrations and diagrams which are of considerable value to the reader. The book is planned to meet the demands of the general reader. It seems to have done this with unusual success. In the last two chapters there is a discussion of various phases of heredity in man and a resumé of the eugenics movement.

While there is a general acceptance by the various authors of the application of Mendelian inheritance, there is not the extreme application which has been somewhat general of late. Each of the joint authors expresses considerable caution, which is to be commended, in discussing the "unit character," which it is to be noted is the fundamental conception of Mendelian inheritance.

For example we find such statements as the following: "There are strong reasons for believing that mendelizing characters can be modified by selection, though this idea is vigorously denied by many Mendelians. I prefer to think with Darwin that selection can do more than this, that it can heap up quantitative variations until they reach a sum total otherwise unattainable and that it thus becomes creative" (Castle, p. 56). On this question East (p. 112) states that "stability is a relative thing. Many unit-characters are high in the scale of stability, others may be low," and Davenport (p. 269) says: "We find useful the principle of the unit character. Whether it be ultimately accepted or discarded, it is useful today, and so we accept it as a guiding hypothesis." These points of view are of special value as they come from investigators whose particular experimental work has required a careful analysis of characters.

The general theme of the book is the broad evolutionary view of heredity which takes into account the origin and inheritance of dissimilarity as well as of similarity. The book is clearly the best popular exposition of the topics outlined in the table of contents.

A. B. STOUT

NEWS ITEMS

We regret to record the death on February 1 of Mr. John Innes Kane at his residence on West 49th Street, New York. Mr. Kane was the chairman of the finance committee of the Torrey Club, and he also served on the entrance committee of the board of managers of the New York Botanical Garden. He was widely identified with various other activities in New York.

Dr. J. Arthur Harris spent January at the Missouri Botanical Garden and is spending February and March at the Desert Botanical Laboratory at Tucson, Arizona.

Fifteen botanists were the guests of Prof. R. A. Harper on February 16, at a dinner given by him to D. H. Fairchild and W. T. Swingle, both of the U. S. Department of Agriculture.

Early in February some suffragettes of the Pankhurstian persuasion succeeded in destroying a number of valuable orchids at the Royal Botanic Gardens at Kew. On February 20 these franchise enthusiasts successfully obliterated a pavilion at the gardens. The authorities have seriously considered closing the gardens to the public for a short period.

We learn from the daily papers of the sale, by the Trustees of Columbia University, of the northwest corner of Forty-seventh Street and Fifth Avenue, for the sum of three million dollars. Over a century ago the corner formed a small portion of the large Elgin Botanic Gardens, which Dr. David Hosack, whose name is so intimately associated with medical progress in America, purchased from the city for \$4,807.36. There were about twenty acres in the garden, the first to be started in New York, embracing all of the four blocks from the north side of Forty-seventh Street